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7/1/2013

BRIDGE CONSISTS OF

- 1 - 90'-0" BULB TEE, 54 IN, PSC BEAM SPAN ----- SPECIAL DESIGN
- 2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN
- 4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)
(L = 4'-0"; W = 1'-1"; H = 2'-8")
- BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
- TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)

DRAINAGE DATA

DRAINAGE AREA ----- 3.5 SQ MILES

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
50 YEAR	321 CFS	4.12 FPS	78 SQ FT	0.04 FT
100 YEAR	368 CFS	4.34 FPS	85 SQ FT	0.07 FT
500 YEAR	488 CFS	4.92 FPS	99 SQ FT	0.14 FT

TRAFFIC DATA

TRAFFIC ----- ADT = 11,200 (2016)
ADT = 16,000 (2036)

DESIGN SPEED ----- 55 MPH

TRUCKS ----- 12.5%

24 HR TRUCKS -----14.0%

DIRECTIONAL ----- 60 %

UTILITIES

NO UTILITIES ON BRIDGE

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2001 EDITION, AND 2008 SUPPLEMENTAL SPECIFICATIONS AS MODIFIED BY CONTRACT DOCUMENTS.

REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.

CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES $\frac{3}{4}$ " UNLESS OTHERWISE NOTED.

DETOUR STRUCTURE - PROVIDE A MINIMUM OF TWO 60 INCH DIAMETER CONCRETE PIPES IN THE DETOUR FOR THIS SITE. SEE ROADWAY DETOUR/STAGING PLANS FOR DETAILS AND PAYMENT.

TRAFFIC CONTROLS - SEE ROADWAY PLANS FOR DETOUR, TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT..

EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS MAY BE PURCHASED BY SUBMITTING A REQUEST ON THE GEORGIA DOT WEBSITE AT:

HTTP://WWW.DOT.GA.GOV/DOINGBUSINESS/RESEARCH/PAGES/ROADDESIGNSEARCH.ASPX

THE ORIGINAL BRIDGE WAS BUILT UNDER PROJECT NUMBER S353(2) (PI NO. H001445). WIDENED BRIDGE PLANS ARE NOT AVAILABLE.

WAITING PERIOD - DO NOT BEGIN WORK AT BENTS 1 AND 2 UNTIL THE COMPLETED END FILLS HAVE BEEN IN PLACE FOR AN ESTIMATED PERIOD OF 45 DAYS.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

DRIVING RESISTANCE - DETERMINE DRIVING RESISANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVSION 520.

DYNAMIC PILE TESTING - PERFORM PILE TESTING ON FIRST PRODUCTION PILE AT BENTS 1 AND 2 USING THE PILE DRIVING ANALYZER (PDA)IN ACCORDANCE WITH SPECIAL PROVISION SECTION 523. NOTIFY THE GEOTECHNICAL BUREAU OF THE GEORGIA DOT OFFICE OF MATERIALS AT 404-608-4720 TWO WEEKS PRIOR TO DRIVING PILES.

WAVE EQUATION - PERFORM WAVE EQUATION ANALYSIS (WEAP) IN ACCORDANCE WITH SPECIAL PROVISION 520. PROVIDE RESULTS OF THE WEAP TO THE GEOTECHNICAL BUREAU OF THE GEORGIA DOT OFFICE OF MATERIALS FOR REVIEW AND APPROVAL TWO WEEKS PRIOR TO DRIVING PILES.

STEEL H-PILES - USE STEEL FOR H-PILES THAT MEETS THE REQUIREMENTS OF ASTM A 709 GR 50.

SMOOTH DOWEL BARS - PLACE SMOOTH DOWEL BARS IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUT IN PLACE SIMILAR TO ANCHOR BOLTS, SEE SUB-SECTION 501.3.05.B.3 OF THE GEORGIA DOT SPECIFICATIONS. STIRRUPS MAY BE SHIFTED SLIGHTLY TO CLEAR FORMED HOLES.

GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY AS PER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS.

SALVAGE OF STRUCTURAL STEEL - ALL STRUCTURAL STEEL IS TO BE SALVAGED, CUT AT SPLICE POINTS RESULTING IN LENGTHS APPROXIMATELY 34 FEET AND TRANSPORTED TO THE DISTRICT 2 MAINTENANCE STORAGE AREA IN TALIAFERRO COUNTY, GA. UNLOAD THE SALVAGED COMPONENTS AS DIRECTED BY GEORGIA DOT PERSONNEL. NOTIFY THE DISTRICT 2 MAINTENANCE ENGINEER TWO WEEKS PRIOR TO DELIVERY.

WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF CLEANING AND BENDING OF EXISTING REINFORCEMENT, WATERPROOFING, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CSBRG-0007-00(167)	81	176

DESIGN DATA

SPECIFICATIONS ----- AASHTO LRFD 5TH EDITION, 2010
(DESIGNED FOR SEISMIC PERFORMANCE ZONE 2)

TYPICAL HL-93 LOADING ----- IMPACT ALLOWED

FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT

CONCRETE: SUPERSTRUCTURE ----- CLASS D, f'_c = 4,000 PSI
BARRIER ----- CLASS D, f'_c = 4,000 PSI
PSC BEAMS ----- CLASS AAA, f'_c = 6,000 PSI
PSC BEAM ALLOWABLE TENSION ----- 465 PSI
SUBSTRUCTURE ----- CLASS A, f'_c = 3,000 PSI

REINFORCEMENT STEEL: ----- GRADE 60, f_y = 60,000 PSI

PRETENSIONING STRANDS: ----- f'_s = 270,000 PSI

STEEL H-PILES: ----- f_y = 50,000 PSI

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
500-0100	380	SY	GROOVED CONCRETE
500-1011	LUMP	LS	SUPERSTR CONCRETE, CL D, BR NO - 1 (140)
500-2100	168	LF	CONCRETE BARRIER
500-3101	40	CY	CLASS A CONCRETE
507-9030	441	LF	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO - 1
511-1000	4788	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (33824)
520-1147	250	LF	PILING IN PLACE, STEEL H, HP 14 X 73
520-4147	1	EA	LOAD TEST, STEEL H, HP 14 X 73 (IF REQD)
523-1100	2	EA	DYNAMIC PILE TEST
540-1101	LUMP	LS	REMOVAL OF EXISTING BR, STA. 111+91.00

BRIDGE NO.1

GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

GENERAL NOTES
S.R. 232 OVER WALTON BRANCH
COLUMBIA CO. CSBRG-0007-00(167)

NO SCALE MAY 2013

DESIGNED JLM	CHECKED ACB	REVIEWED WMD/DLC
DRAWN JLM	DESIGN GROUP ACB	APPROVED BFR

1 INCH WHEN PRINTED FULL SIZE